

# Flexibility through Learning Outcomes: Implications for Quality

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## Abstract

Flexibility in learning is an acknowledged necessity for a knowledge society. This flexibility has been developing in an incremental fashion (discrete cycles, credits, distance learning, learning outcomes). Full flexibility in learning means that horizontal and vertical traversals between different learning pathways (formal, non-formal, informal) are supported and recognized, and higher level qualifications can be obtained this way. It is widely believed that such a state of affairs can be achieved through the notion of learning outcomes. From this perspective, the viability of the proposition of full flexibility in learning depends critically on whether the same or at least comparable learning outcomes could be potentially achievable through vastly different learning pathways and whether the potential means for assessing such learning outcomes could credibly assure quality. This paper examines the viability of the proposition of full flexibility in learning with respect to quality, suggesting that there is an urgent need to agree on European standards and guidelines for quality assurance concerning the non-formal and informal learning pathways.

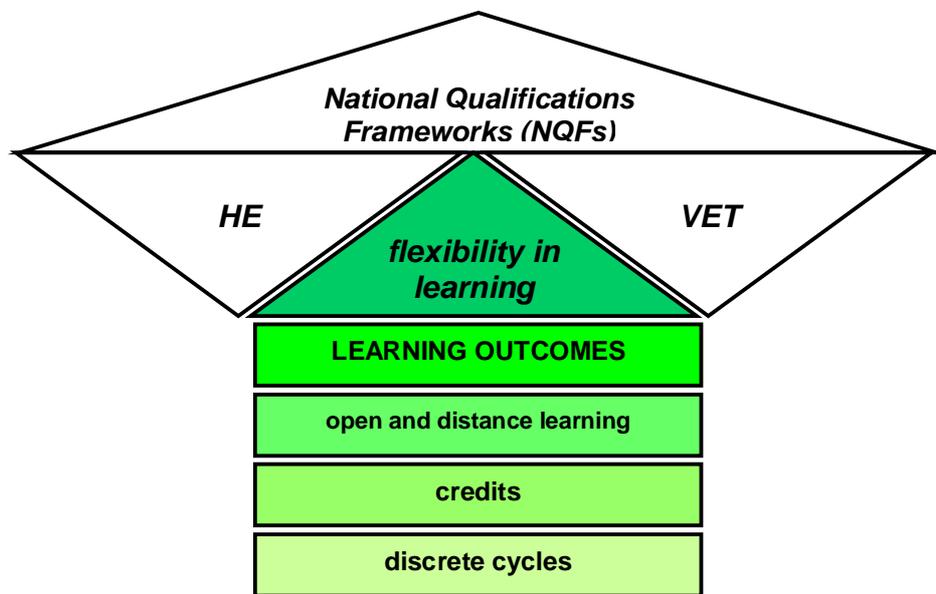
## 1. Flexibility in learning for a knowledge society and its incremental development

Flexibility in learning is an acknowledged necessity for a knowledge society [13]. This means that in addition to the traditional, formal pathway of learning, other learning routes, e.g. non-formal and informal learning [3,7] are supported and recognized. Moreover, it means that traversals between the various learning pathways are possible. It is widely believed that flexible learning can be achieved through the notion of learning outcomes [1,2,18]. This notion has gradually acquired central significance [19]; the opinion that the realization of a European Higher Education Area (EHEA) depends critically on the breadth and consistency of application of learning outcomes, is increasingly being heard.

The acceptance and implementation of flexible learning pathways, with learning outcomes as the central building block, entails substantial reforms for HE systems, for Vocational Education and Training (VET) systems and for systems dealing with the accreditation and recognition of qualifications. Significant steps in this direction have been made in the context of the Bologna process and the Lisbon strategy. However, there is still substantial ground to be covered if flexible learning pathways will ever become a reality for higher level qualifications of all three Bologna cycles. At the centre of it lie issues of quality. Unless such issues can be resolved and agreed upon at European level, flexible learning will remain a topic for academic discussions. This paper attempts to examine the viability of the proposition of full flexibility in learning and to point out some of the implicated quality issues.

Flexibility in learning has been developing in an incremental fashion, through the introduction of discrete cycles and the gradual abolition of long combined programmes, the use of credit-based curricula and credit accumulation, the increasing use of open and distance learning modes, and now learning outcomes (see Figure 1). Flexible learning can therefore be incrementally built into the constructions of HE systems, VET systems, recognition of qualifications and national qualifications frameworks. Full flexibility in learning could be tentatively defined as follows: It is a state of affairs whereby learners

can move horizontally or vertically<sup>1</sup>, within and across diverse forms and hence routes of learning (formal, non-formal, informal) transferring and accumulating learning achievements (across or within the different learning routes) where diverse spatio-temporal frames are permitted and the formal accreditation/certification of the learning achievements is possible. Under no circumstances, should flexibility in learning mean reductions in quality or easy acquisition of qualifications, since obviously such developments would not be serving the interests of knowledge societies.



**Figure 1:** Flexible learning incrementally built into the constructions of HE systems, VET systems, recognition of qualifications and national qualifications frameworks

## 2. Converging learning pathways through common learning outcomes and quality standards

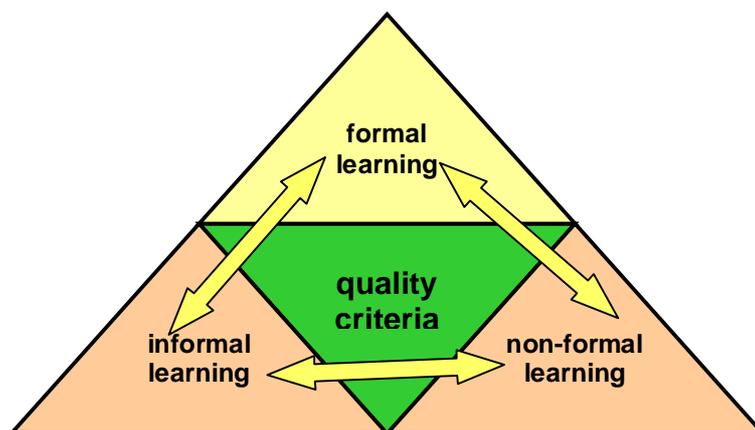
The formal route of learning is well established and understood, with acceptable procedures for the transfer and accumulation of credits, and the recognition of qualifications. HE institutions have the major, and in some countries exclusive role regarding the formal route of learning and awarding of higher level qualifications. The European Standards and Guidelines (ESG) for quality assurance [12] are based on the formal route of learning. Likewise the criteria and procedures of the Lisbon Recognition Convention [21] are geared towards the framework of formal learning. The routes of non-formal and informal learning, as alternative routes to formal (high level) qualifications, represent relatively recent developments and most countries are still trying to get into grips with them [3-5,7]. These alternative routes of learning implicate entities other than HE institutions, namely professional or public organizations, VET establishments, enterprises, economic sectors, etc.

The meta-frameworks of qualifications developed at European level [22,24] aim to encompass the acquisition of qualifications under different learning settings. In particular, the Qualifications Framework for the EHEA defines descriptors, i.e. generic learning

<sup>1</sup> Vertical traversal means that the accumulation of learning achievements continues at a higher level/cycle, going from one learning pathway to another. Horizontal traversal means that learning achievements are being transferred within the same level/cycle from one learning pathway into another.

outcomes, for the three Bologna cycles (Bachelor, Master, and PhD). These descriptors are meant to be independent of the learning setting. Thus, in theory, the given learning outcomes could potentially be achieved via different learning routes or through a combination of such routes. So far, this has not been demonstrated at large in practice, and in reality, the major reforms brought about, until now, through the Bologna process, concern principally the formal route of learning. On the other hand, the major driving force behind the development of the common European principles for the validation of non-formal and informal learning [8], in conjunction with the European Qualifications Framework (EQF) for lifelong learning, appears to be the validation of learning outcomes reflecting mainly practical skills and competencies [7], and not knowledge per se. As such, this validation concerns mainly lower level qualifications.

Flexibility in learning for the higher levels (1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> cycle qualifications) requires the merging and extending of the outcomes of the Bologna process and the Lisbon strategy [16] so that alternative learning pathways could be applicable to all qualification levels under commonly agreed quality standards. The establishment of accepted, quality-based mechanisms for the accreditation and recognition of prior, non-formal or informal, learning<sup>2</sup> is a fair request. Such a development would give a strong incentive to learners for continuous learning and moreover it would enable the utilization of such learning for different purposes.



**Figure 2:** Commonly agreed quality standards, independent of learning settings, underpinning the validation and certification of learning outcomes, could provide the convergence between drastically different learning routes

The specification of basic quality standards, that could be applicable in a comparable way under diverse learning settings may well result in overcoming the obstacles/skepticism that currently exist, thus enabling the transfer and accumulation of learning achievements/outcomes across such different learning pathways. The agreed quality standards should set the minimum requirements regarding: (a) the specification of actual learning outcomes (for specific qualifications and disciplines), (b) the criteria and procedures for the validation and certification of the achieved learning, and (c) the criteria and procedures for assessing the assessors. Commonly agreed learning outcomes, in conjunction with commonly defined quality standards could provide the convergence between the alternative learning pathways (see Figure 2). The endorsement of quality standards at European level for the non-formal and informal pathways regarding the specification and validation of learning outcomes leading to the certification of high level

<sup>2</sup> This means the “formalization” of informal or non-formal learning by endowing it with a formal qualification/certification of some kind.

qualifications is necessary for transparency, credibility, coherence, comparability and overall increased accountability for the relevant decisions.

Quality in learning, from the perspective of the sought flexibility, is therefore grounded on the following two premises at least:

- i. The actual learning outcomes may be specified, on the one hand independently of the learning setting, and on the other hand in a manner so that everyone could interpret them in a comparable way, for example their level, the degree of difficulty/effort associated with their attainment, etc.
- ii. The means for assessing and certifying the attainment of these outcomes are valid and fit for the particular purpose and the assessors are reliable/credible and competent to undertake the assessment of the learning outcomes.

Regarding premise (i), it is noted that the learning outcomes in qualifications frameworks are abstract statements, potentially open to multiple interpretations. The learning outcomes for an actual qualification (cycle and discipline) should be specific and not open to widely different interpretations. Moreover, for high level qualifications, such learning outcomes would not be expected to be confined to practical skills and competencies, but domain knowledge is also expected to figure as a major component.<sup>3</sup> The need for clearly defined learning outcomes is stressed in [17]; however this is not necessarily easy as demonstrated in [9].

If the above premises can be satisfied, then there is promise that a state of full flexibility in learning could be possible, meaning that prior experiential or work-based learning could be validated and certified in a commonly accepted way. For example, would it be possible for someone to be awarded the highest academic qualification of a doctoral degree through informal learning, or put in a different way, could such a development be justified? Incidentally, in some countries this is already happening. The scenario is the following: The person (a “researcher”) is carrying out self-directed research in his/her work place, he/she publishes the results of his/her research in scientific journals or conference proceedings and ultimately his/her learning outcomes (research results in this case) are recognized by some authority that has the right to award doctoral degrees<sup>4</sup> that they constitute the fulfillment of a doctoral programme and the given authority awards this person a doctoral degree<sup>5</sup>. In this example, the traditional quality standards for PhD qualifications, namely contribution to knowledge, publishability of research results, and potential to do independent research, have been more than satisfied (the results are not just publishable, they have already been published demonstrating at the same time contribution to knowledge, the person not only has potential to do independent research but has already demonstrated the ability to do so).

Comparable learning achievements could therefore accrue from utterly diverse learning settings. In the above example, it is even true to say that the informal setting has yielded higher achievements, albeit at the highest academic level, the third cycle, and hence quality was not adversely affected by following a non-standard learning route. In such a

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<sup>3</sup> It is assumed that all higher level qualifications included in a qualifications system, are obtainable through the formal learning route (without implying that the awarding body is necessarily a HEI). The formal route, therefore, constitutes the point of reference regarding learning outcomes and quality assurance for these qualifications (in fact, this seems to be the spirit in the new ECTS Guide regarding the accreditation of non-formal and informal learning).

<sup>4</sup> Presumably the given authority is a university or an academy of sciences.

<sup>5</sup> A question that could justifiably arise in such a context would be “what if the person is not a holder of a 1<sup>st</sup> cycle qualification?”

case it would not be justifiable to deny recognition. When there are internationally accepted quality standards for a given cycle, as it is the case with the doctoral cycle, and provided such standards can be met by different learning routes, then one could argue that no substantial differences arise with respect to the ultimate results (learning achievements) from diverse learning routes and recognition should be granted.

What about the other two Bologna cycles, the 1<sup>st</sup> (Bachelor) and the 2<sup>nd</sup> (Masters) cycles? Is it possible to define internationally accepted quality standards, through which it could be possible to ascertain in an objective and credible manner the quality of the ultimate result of learning, independently of the learning pathway followed? Could such alternative learning pathways, with respect to the two more basic cycles, lead to adequately comparable and compatible learning outcomes?<sup>6</sup> In some cases it has already been demonstrated that this is possible [20]. Comprehensive written examinations/interviews (of different kinds) and/or case studies in conjunction with certified professional achievements as recorded in one's portfolio [4, 25, 26], could potentially constitute the means for certifying the specific learning outcomes on the basis of the corresponding quality criteria.

If the scenario sketched above is realizable, then the current status quo whereby 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> cycle qualifications can typically, if not exclusively, be obtained through the route of formal learning, would change drastically permitting the acquisition of qualifications at all three Bologna cycles through other learning routes or combinations of routes, for example entirely through the route of informal learning. However, various issues need to be considered in order to decide whether full flexibility in learning is an attainable state of affairs. Some of these issues are the following:

- i. Could the learning experiences from following a formal Bachelor level program of duration 3 to 4 academic years of full time study (that unboundedly includes foundational knowledge and principles of the given discipline in a comprehensive manner) be comparable to the learning experiences accruing from an informal work-based context, albeit of many years duration? A similar question can be coined with respect to Masters programmes.<sup>7</sup> In [17] it is commented that it is not possible to acquire the same qualification as in the formal school system, only a part, while in [20] it is reported that for some specific activities the informal learners performed on an even higher level than the formal learners due to their vast (over twenty years) working experience.
- ii. Could such comparisons be unfair since a formal academic setting, and an informal experiential setting differ in so many parameters (the time frame for

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<sup>6</sup> This means that the learning outcomes from the different routes do not exhibit substantial differences, although the notion of "substantial differences" is still clouded with fuzziness.

<sup>7</sup> At recent discussions between the author and a major provider of work-based learning programmes, it transpired that "work-based learning" could be considered the topic of learning and not merely the means of learning. A key objective of the work-based learning programmes of the particular provider is to teach people how to become more effective learners and problem solvers in their work-place, skills that are transferrable to other work places within the same or comparable profession. The learning of specific knowledge (or knowledge enhancements) is of secondary importance. Thus, for example, as admitted by the given provider, an MA in Social Work (obtained in the conventional way) would be substantially different from an MA work-based learning studies (Social Work). Although, one could argue that such qualifications are of comparable value and/or of the same level (i.e. 2<sup>nd</sup> cycle qualifications), still they serve different purposes in the work market. In order to avoid misunderstandings, there should be a general appreciation of the semantic differences between the various types of qualifications within the same level/cycle, so that every case is treated fairly (i.e. recognition is neither denied nor excess privileges are granted by equating unequal things).

example)? But then again would it be fair to grant the same certification/recognition to learning achievements if these exhibit substantial differences and are not underpinned by the same quality standards?

- iii. Should it be acknowledged that within the same level/cycle, there could be distinct types of qualifications, which although considered to be of the same level, and of equal or comparable value (with respect to shared purposes and shared access provisions), still they have distinct characteristics, distinct profiles and orientations and thus distinct quality standards? For example, there could be academic Bachelors, professional Bachelors, and vocational Bachelors. Some countries have already introduced the distinction between academic and professional Bachelors that represent different types of 1<sup>st</sup> cycle qualifications, while with respect to 2<sup>nd</sup> cycle qualifications the distinction between academic and professional Masters has been in existence for many years in a number of countries (in fact a rapid increase in professional Masters has been recently observed [10]). Moreover, the category of professional doctorates has emerged in recent years.

Given the above open issues, one hopes, that some clarifications could come through the gradual development of National Qualifications Frameworks (NQFs). An NQF, as an overarching meta-framework, should aim to give a clear typology and semantics of the qualifications included in the relevant qualifications system. However, qualifications frameworks are not a panacea and cannot be a solution to everything, as clearly demonstrated in [29] that analyses the concept in a critically constructive and evidence-based manner. Evidencing the benefits of NQFs on a broad scale may be a long way from now, while at the same time their ability to promote and accredit informal learning is questioned in [27] and [28]. This claim is further supported by the cases of the few countries that have pioneered the concept (before the development of the European meta-frameworks) and have incrementally developed their NQFs which are still evolving [6,23]. One of the countries paving the way is France; as reported in [15], in 2006 there were 3,705 cases in France where all or part of a diploma was awarded on the basis of the recognition of prior experiential learning. The case of France is an exception. In most other countries there is little progress [10]. The same observation, namely that “the procedures for the recognition of prior learning are at an early stage of development in the majority of countries” is also made in the 2007 stocktaking report for the Bologna process [5], that also recommends to “link recognition of prior learning with the development of NQFs and with systems of credit transfer and accumulation”. It should be stressed, though, that in parallel with the development of NQFs, flexibility in learning should be grounded on agreed European quality standards for the different learning pathways, if fully flexible learning will ever be a viable proposition.

### **3. Learning achievements and associated effort**

The discussion is rounded by focusing on a key aspect of learning, namely the effort (or workload) associated with learning. Learning is measured qualitatively through its (learning) outcomes and quantitatively through the effort leading to the outcomes. A process of learning, and ultimately a qualification, could therefore be abstracted (qualitatively) in terms of learning outcomes and (quantitatively) in terms of effort. The (learning) “effort” translates into credits of some kind.

Learning, therefore, cannot be independent of the effort of the person for attaining the particular learning. Consequently, the European Credit Transfer and Accumulation System (ECTS) [11], calls for the integration of learning outcomes and credits, where credits denote the workload of learners. It is true to say that the interpretation of ECTS

credits in terms of absolute times, and their association with academic years of full-time study, reflects the formal mode of learning and its typical time-frame. As such it is not immediately obvious how ECTS credits could apply to the non-formal or informal learning settings (in [3] the relationship between ECTS and the accreditation of prior experiential learning is characterized as problematic, and this is considered a major obstacle for the validation of informal learning). However, the ECTS has been widely used as the basis for reforming HE programmes throughout Europe and is continuously being updated and refined on the basis of developments and experiences in using it.

More recently, but so far largely at a theoretical level, the European Credit System for Vocational Education and Training (ECVET) [14] is trying to define an appropriate credit system for transferring and accumulating learning experiences in the context of vocational education and training, thus principally addressing the non-formal and informal learning routes. It is hoped that such a new credit system would be compatible to ECTS if the flexibility in learning discussed above is ever to be achieved; otherwise the dividing barriers could become unbridgeable.

Everyone would agree that the new developments call for different time-frames to learning. Hence, rigidity and a single time-frame are no longer viable. Although everyone would agree that relaxations in time-frames are necessary, most people would also agree that the notion of effort (or workload) as an integral aspect of the sought learning cannot be abolished. The associated effort should be defined in a way applicable to different learning settings. A definition with exclusive or principal criterion, the absolute time required, would not be acceptable.<sup>8</sup> Going back to the example of the informal learning route with respect to the doctoral cycle, the effort of the informal learner would be substantially more than the effort of a corresponding formal learner.<sup>9</sup> This should be expected, since self-directed or even unintentional learning (which is a characteristic feature of informal learning) is more difficult and error prone than teacher-guided learning (encountered in formal settings that by definition cultivate and promote learning). A learner, outside a formal setting, could easily be let astray and instead of moving towards, is moving away from the attainment of whatever learning pursuits he/she may be having that somehow arise in an unintentional manner. Typically, the percentage of people abandoning formal studies through e-learning is higher than the corresponding percentage of people abandoning their formal studies attended in the conventional way of physical presence at the institution. By analogy, if and when there is full flexibility in learning, it would be expected to have higher percentages of success with respect to formal learning, while at the same time the required effort for achieving the same learning outcomes would be comparably higher for the non-formal/informal learners. Thus, flexibility in learning should not mean that it would be easier for someone to acquire some qualification through the informal route of learning. The appropriate quality standards can ensure that this would not be so. As pointed out in [4] "While we can observe some concern regarding the quality of validation processes (is this the easy way to get a certificate? Can we trust the process?), this has not seriously affected the implementation of these approaches".

Assuming that a common semantics between ECTS and ECVET credits can be reached then the transfer and accumulation of credits between different learning settings could be possible. This in turn could lead to the "formalization" of non-formal and informal learning

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<sup>8</sup> A hierarchy of conceptual levels of effort/difficulty, instead of measures of absolute workload, is being proposed as an alternative qualitative interpretation of credits. A given degree or qualification could then comprise given amounts of learning (in terms of number of credits) at given levels of effort/difficulty.

<sup>9</sup> So far there are no standard guidelines regarding the application of ECTS with respect to the doctoral cycle.

achievements. For convergence purposes, all forms of learning would need to be projected to measurable learning outcomes and associated credits or levels of effort/difficulty. For non-formal learning this should not be difficult to do as it is largely planned learning. Difficulties would be expected with informal learning since it is open-ended and unplanned learning. Its formalization, though, would require the explication of learning outcomes (from prior experiences) and their subsequent assessment before awarding the associated credits.

#### **4. Conclusions**

Flexibility in learning is an acknowledged necessity for a knowledge society. A state of full flexibility in learning means that it is possible for someone to acquire some (higher level) qualification by accumulating learning experiences and corresponding outcomes from diverse learning settings (formal, non-formal or informal). However, flexibility in learning should not mean reductions in quality or easy acquisition of qualifications.

In order for flexibility in learning to become a viable proposition it is, therefore, necessary to agree on a set of European quality standards for types of learning other than formal learning. These quality standards should set minimum quality requirements regarding: (a) the specification of learning outcomes so that they are universally perceived in a comparable way, (b) the assessment criteria and procedures for the credible validation of learning outcomes and (c) the validation of the assessors. The ESG for quality assurance should therefore be appropriately extended to include the agreed quality standards for the non-formal and informal learning pathways. Likewise the recognition criteria and procedures for the Lisbon Recognition Convention may need to be appropriately extended. Such developments will lead to higher transparency, coherence, compatibility, and credibility that collectively would enhance the accountability of the various actors involved in the informal/non-formal learning and validation/certification processes.

Finally, another potentially welcome consequence of implementing flexibility in learning is that a legitimate means will be provided for the recognition and certification of (formal) learning achievements conducted in the context of non recognized institutions.

#### **Discussion Questions**

- Can non-formal/informal learning achieve the same or at least adequately comparable learning outcomes as those obtained through programmes of formal study at the three Bologna cycles?
- Can qualifications built on, or incorporating non-formal/informal learning have the same or comparable value as those achieved through formal programmes of study? Would it be advisable to introduce a typology of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> cycle qualifications based on the learning pathway followed?
- How can the European standards and guidelines for quality assurance be extended to include quality standards for non-formal/informal learning?

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